the opinion of Schiffner. L. longidens grows in rather loose tufts. and is either dull green in color or more or less tinged with brown or yellow. It is more delicate in texture than most of its allies, the leafcells being thin-walled except for their minute trigones. The leaves are ovate-quadrate or ovate-rectangular in outline and are bifid one third or less with an obtuse sinus. The divisions of the leaves are narrowly triangular and acute, rarely diverging from each other to any extent. The species rarely fruits but usually develops gemmiparous branches which are among its most striking features. These branches are ascending or erect and their crowded leaves are almost transversely attached. They spread obliquely from the axis but are frequently squarrose in the outer part. The gemmae are borne in small clusters at the tips of the lobes; they are globoid or shortellipsoid in form, sometimes with obscure angles, and are either unicellular or bicellular. In color the gemmae are normally reddish brown, but the New Hampshire specimens bear green gemmae and Schiffner states that he has observed a similar condition among European specimens. Probably the lack of pigmentation in these cases is due to the fact that the plants were deeply shaded. L. longidens seems to attain its best development on rocks but it also occurs on logs; it is apparently confined to alpine or subalpine localities.

(To be continued.)

QUERCUS PRINOIDES WILLD. VAR. RUFESCENS VAR. NOV.

ALFRED REHDER.

In the spring of 1903 Mr. F. G. Floyd drew my attention to a peculiar shrubby Oak he had discovered the year before on the island of Nantucket. I subsequently visited the island myself and found the shrub in question in the locality indicated by Mr. Floyd. It grows there in the low thickets of Scrub Oak consisting of Quercus prinoides and ilicifolia and covering a large part of the higher rolling land between Nantucket and Siasconset, but occurs only as scattered bushes between the other Oaks. In general appearance it resembles most the Q. prinoides, but differs in the villous and rufous or rather fulvous pubescence which covers the under side of the leaves and

the young branches. This pubescence and the locality suggested at first sight a possible cross between Q. prinoides and ilicifolia, but as all the other characters of the form are those of Q. prinoides, this idea had to be abandoned; moreover, no cross has as yet been observed between a Black and a White Oak. No mention of a Q. prinoides with the pubescence described could be found in literature, but in looking through the Gray Herbarium and the herbaria of the Arnold Arboretum and of the New England Botanical Club I found at least two specimens which undoubtedly belonged to this form, one from Cape Cod and one from the Pine barrens of New Jersey so that it may be considered a coast form of Q. prinoides, and as it differs also in a few other characters from the type, it seems to deserve a varietal designation and may be distinguished as

Quercus prinoides Willd. var. rufescens var. nov.

A typo recedit foliis subtus non solum albo-tomentosis sed etiam fulvescenti-villosis praecipue secus costam mediam ramulisque hornotinis fulvescenti-pubescentibus, foliorum lobis acutiusculis mucrone calloso instructis, etiam foliis obovatis quam ea formi typici omnino minoribus et latioribus saepe undulatis.

The variety differs from the type in the leaves having beneath besides the close white tomentum a woolly yellowish pubescence particularly along the midrib and in the branches being pubescent at least when young. The leaves are generally smaller are broader and obovate with acutish callous-tipped lobes and often undulate margin.

Massachusetts: Nantucket Island, between Nantucket and Siasconset, Sept. 1902, F. G. Floyd; August 29, 1903, Alfred Rehder; Cape Cod, Centreville, damp woods, July 14, 1903, Clara Imogene Cheney; New Jersey: Pine barrens of Manchester, August 26, 1852, A. C. Hexamer. The following specimens must also be referred to this variety, though they are somewhat deviating from its type. New Jersey, Pine barrens (Herb. Gray) differs in its larger leaves; Massachusetts, Jamaica Plain, 1887, C. E. Faxon, has leaves with a slighter villous pubescence; North Carolina, Dunsmore, Buncombe Co., September 21, 1897, Biltmore Herb. No. 828^b, has less villous and longer and narrower leaves and comes from the mountains of western North Carolina.

The typical Quercus prinoides has the generally larger and often oblong-obovate or even oblong leaves more gradually narrowed toward the apex and covered beneath with a close whitish tomentum, which is sometimes reduced to scattered stellate hairs; the branchlets

are glabrous. Intermediate forms between the species and the variety are in Nantucket always associated with plants representing the type of the variety.

ARNOLD ARBORETUM.

AN INTERESTING LOCALITY.

E. B. HARGER.

PISTAPAUG (or PAUG) POND is a natural pond of manifest glacial origin, about three-fourths of a mile long and a third as broad lying at the intersection of the four towns of North Branford, Guilford, Wallingford and Durham about twelve miles northeasterly from New Haven, Connecticut. It is mostly within the limits of Wallingford and Durham about one-half in each. On the east of the pond (the Durham side), one of the characteristic trap-ridges of the region, known as Pistapaug Mountain rises from the water's edge more than 200 feet above the pond which itself is at an elevation of some 400 feet above sea level. To the northwest is another trap hill; and a highway skirts closely the northern border of the pond and runs through the pass between the two hills. Westward is a broad tract of cleared land and to the south lie low wooded hills, where doubtless runs the old valley now dammed with glacial drift.

In the spring of 1903 I found in the Eaton Herbarium at New Haven a specimen of *Polymnia Canadensis* L., collected in 1880 by Prof. O. D. Allen and labeled "Trap slide near Paug Pond, Durham, "Conn." I immediately formed the resolution of exploring the region, but had no opportunity of doing so until Sept. 15, 1905. On this trip, almost at the first sight of a "trap slide" I found the *Polymnia*, but on the Wallingford side of the pond. However, on crossing to the slopes of Pistapaug Mountain I found the plant in great abundance, both near the foot and near the top of the talus-slope, which here runs directly into the water. The remoteness of the locality from houses and the extent of territory over which the plant is spread seem to indicate that is not of recent introduction, but may be considered native to Connecticut.

Although the main object of the trip was fulfilled by the re-discovery of *Polymnia*, the further results were very gratifying. At the base